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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,962	01/19/2001	Seiichi Aoyagi	112857-246	9153

29175 7590 04/09/2003

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EXAMINER
NOLAN, DANIEL A

ART UNIT	PAPER NUMBER
2655	

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/765,962	AOYAGI ET AL.	
	Examiner	Art Unit	
	Daniel A. Nolan	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 January 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 9-11* is/are rejected.

7)☒ Claim(s) *6-8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 January 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

(Note that as of October 1, 2002 a new **Art Unit 2655** was established that includes this application, and that this new AU number should be used in all future correspondence.)

1. Issues arising from the language used in the immediate application require that this explanation be provided to distinguish between the separate processes of "voice recognition" and "speech recognition." Voice recognition identifies individuals by sound, while speech recognition derives meaning from utterances. The USPTO categorizes these separately as class/subclasses 704/246 and 704/251, respectively.

Information Disclosure Statement

2. The listing of references in the specification (such as in page 17) is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

3. The drawings are objected to because the term "*voice recognition*" should be "*speech recognition*" when it appears in conjunction with dialog, language or text (as with item 1 in figure 2) – see the opening statement in this action.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

- Item *109* (figure 1) is not found in the specification.
- *S13* (figure 10) is not found in the specification.

5. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

6. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "*Collecting Consumer Information by Speech*".

7. The abstract of the disclosure is objected to because the term "*voice recognizing*" (in the 1st line) is subject to misinterpretation – see the statement beginning this office action. If the dialog-managing unit employs word recognition, the term should be changed to "*speech recognition*". Otherwise, no mention should have been made of a dialog exchange. Correction is required. See MPEP § 608.01(b).

8. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification, such as:

- "Infoseek™" (3rd line from end page 1) is misspelled.
- The word "manners" (5th line from end page 18) should be "matters" or "custom".

Appropriate correction is required.

9. The use of the trademarks such as "*Yahoo*™", "*Infoseek*™" and "*ELIZA*™" to name a few, has been noted (3rd lines from end page 1, mid-page 17, etc.) in this application. These should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Objections

10. Claims 1, 5-8 and 10-11 are objected to because of the following informalities:

- The term "*voice recognition*" should be replaced by "*speech recognition*".
- The Examiner is proceeding with the understanding that this change will be appropriate in every occurrence of the phrase that involves recognition of a word, information or dialog.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Cox, Jr.

12. Claims 1-3 and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Cox, Jr. (U.S. Patent 5,685,000).

13. Regarding claims 1, 10 and 11, in *providing a linguistically competent dialogue with a computerized service representative,* Cox, Jr. reads on every feature of the

information processing apparatus for collecting information regarding a user in the immediate application as follows:

- Cox, Jr. (the "*utterance recognition*" of column 3 line 60) reads on the feature of a *voice recognizing means for recognizing voices of the user;*
- Cox, Jr. reads on the feature of a *dialog sentence creating means for creating a dialog sentence* (column 2 lines 32-33) *to exchange a dialog with the user* (column 4 lines 33-35) *based on a result of the voice recognition performed by said voice recognizing means; and*
- Cox, Jr. (column 4 lines 14-16) reads on the feature of a *collecting means for collecting the user information based on the voice recognition result.*

14. Regarding claim 2, the claim is set forth with the same features as claim 1. Cox, Jr. (figure 1 items 10-12) reads on the feature of a *storage means for storing the user information.*

15. Regarding claim 3, the claim is set forth with the same features as claim 1. Cox, Jr. (figure 1 item 14) reads on the feature that *said dialog sentence creating means outputs the dialog sentence in the form of a text or synthesized sounds.*

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Cox, Jr. & Von Kohorn

18. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox, Jr. in view of Von Kohorn (U.S. Patent 5,916,024 A).

19. Regarding claim 4, the claim is set forth with the same features as claim 1.

Cox, Jr. does not deal with the *frequency of words in speech*. Von Kohorn (332 figure 25) reads on the feature that *said collecting means collects the user information* (column 41 line 65) *based on an appearance frequency of a word* (column 42 line 65) *contained in the voice recognition result* (column 18 lines 30-40).

It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Von Kohorn to the device/method of Cox, Jr. so as to apply the tools developed for amusement gaming to further the marketing interests of those products that sponsors such gaming programs.

20. Regarding claim 5, the claim is set forth with the same features as claim 1. Cox, Jr. does not deal with the *broader terms for a word*. Von Kohorn (column 42 lines 30-32) reads on the feature that *said collecting means collects the user information based on a broader term of a word contained in the voice recognition result,* which would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Von Kohorn to the device/method of Cox, Jr. so as to recognize the use of general terms in specifying equivalent or like items.

Cox, Jr. & Hammons *et al*

21. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cox, Jr. in view of Hammons *et al* (U.S. Patent 6,477,509 B1).

22. Regarding claim 9, the claim is set forth with the same features as claim 1. While Cox, Jr. maintains a record of the products in use by the customer; it does not further maintain *information indicating interests or taste.* Hammons *et al* (42 in figure 2) reads on the feature that *the user information is information indicating interests or tastes of the user,* which would have made it obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of Hammons *et al* to the device/method of Cox, Jr. so as to provide material of interest to the consumer.

Allowable Subject Matter

23. Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

24. The following is a statement of reasons for the indication of allowable subject matter:

- The present invention is directed to *extracting survey information from conversation.*

- ✓ Claim 6 identifies the distinct feature that "*counts the number of times of speeches on the same topic based on the voice recognition result, and collects the user information based on a counted value*".
- ✓ Claim 7 identifies the distinct feature that "*counts a time of speeches on the same topic based on the voice recognition result, and collects the user information based on a counted value*".
- ✓ Claim 8 identifies the distinct feature that "*counts the number of times of appearances of the same topic based on the voice recognition result, and collects the user information based on a counted value*".

- The closest prior art of Cox, Jr. and Hammons *et al* discloses collecting specific information determined in response to direct queries on the subject, but fails to anticipate or render the above underlined limitations obvious.

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Lapa *et al* (U.S. Patent 6,076,068 A) coupon delivery system is based on consumer purchasing.
- Gerbaulet (U.S. Patent 5,544,040 A) *manages purchase operations* (column 3 line 8), directs exchanges with users and manages machine *dialogues* (column 3 line 63, column 4 line 5).

- Goldstein (U.S. Patent Application 2001/0032115) monitors consumer activity for subsequent marketing.
- Bassili *et al* (U.S. Patent 5,193,058) gauges interest by recording relative times of response and delay.
- Brodsky (U.S. Patent 5,809,471) retains preferences for subsequent operations.
- Bayya *et al* (U.S. Patent 5,774,860) constructs speech dialogs with prior operations.
- Freeman (U.S. Patent 5,930,757) produces voice conversations using playback.
- Allred *et al* (U.S. Patent 5,765,142) maintains customer information.
- Lockwood (U.S. Patent 5,576,951) records telephonic order information as preferences.
- Herz *et al* (U.S. Patents 5,754,938 & 5,835,087) solicits consumer information.
- Hasegawa (Japan Patent 2001-016335) Communication Market Research System where a subscriber replies immediately to a terminal device.

26. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Daniel A. Nolan at telephone (703) 305-1368 whose normal business hours are Mon, Tue, Thu & Fri, from 7 AM to 5 PM.

If attempts to contact the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To, can be reached at (703) 305-4827.

The fax phone number for Technology Center 2600 is (703) 872-9314. Label informal and draft communications as "DRAFT" or "PROPOSED", & designate formal communications as "EXPEDITED PROCEDURE".

Formal response to this action may be faxed according to the above instructions, or mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or hand-delivered to: Crystal Park 2,
2121 Crystal Drive, Arlington, VA,
Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office at telephone number (703) 306-0377.

Daniel A. Nolan
Examiner
Art Unit 2655

DAN/d
March 27, 2003

DANIEL NOLAN
PATENT EXAMINER